

WHAT IS CLAIMED IS:

1. An apparatus unit replacement assisting method, characterized by comprising:

5 a step of receiving, from a first user, request information expressing a wish to replace a first unit comprising part of a first apparatus owned by said first user with a second unit;

10 a step of receiving, from a second user different from said first user, release information informing release of a second unit comprising part of a second apparatus owned by said second user and usable in said first apparatus; and

15 a step of presenting inquiry information to said first user, asking whether said first user is going to use said second unit released from said second user as a replacement unit for said first apparatus.

2. The apparatus unit replacement assisting method according to claim 1, further comprising:

20 a step of making a provisional contract with said first user when information expressing a wish to use said second unit is received from said first user in response to the inquiry.

3. The apparatus unit replacement assisting method according to claim 1, wherein:

25 said first unit and said second unit are units having substantially a same capability that need to be replaced by a worker.

4. The apparatus unit replacement assisting method according to claim 1, further comprising:  
a step of performing maintenance on said second unit released from said second user.

5 5. The apparatus unit replacement assisting method according to claim 1, wherein:  
said step of presenting the inquiry information is a step of offering said second unit taken from said second user and done with maintenance.

10 6. The apparatus unit replacement assisting method according to claim 1, further comprising:  
a step of calculating and presenting a trade-in price of said second unit to said second user in a case where said second user wishes to replace said second  
15 unit with a third unit.

7. The apparatus unit replacement assisting method according to claim 6, wherein:  
said step of presenting the trade-in price is a step of presenting said second user a price of said  
20 third unit after deduction of the trade-in price of said second unit.

8. The apparatus unit replacement assisting method according to claim 6, wherein:  
said step of presenting the trade-in price  
25 includes, making a trial calculation of the trade-in price by adding expenses needed for replacement including a transportation fee to a trade-in base

price, judging a value of a trade-in from the trial calculation, and presenting the trade-in price to the second user when the trade-in is judged as profitable.

5        9. The apparatus unit replacement assisting method according to claim 6, further comprising:

         a step of having said second user wishing to trade in said second unit present operation history information through an on-line or off-line transmission in a case where said apparatus is configured to  
10        automatically record the operation history information during use, and judging a value of a trade-in with understanding of a use status of said unit for trade-in from the operation history information,

         wherein said step of presenting the trade-in price  
15        includes determining the trade-in price based on a result of the value judgment.

         10. The apparatus unit replacement assisting method according to claim 1, wherein:

         said step of presenting the inquiry information is  
20        a step of presenting said first user a replacement cost lower than a price of said second unit when newly purchased.

         11. The apparatus unit replacement assisting method according to claim 1, further comprising:

25        a step of confirming with said first user whether said second unit as a desired replacement unit is a new unit or a secondhand unit or whether a secondhand unit

is acceptable.

12. The apparatus unit replacement assisting method according to claim 1, further comprising:

5 a step of confirming with said second user about information related to post-treatment of said second unit.

13. The apparatus unit replacement assisting method according to claim 1, further comprising:

10 a step of presenting information about a maintenance fee of said second unit to said second user.

14. The apparatus unit replacement assisting method according to claim 1, further comprising:

15 a step of presenting expenses needed for replacement with said second unit to said first user.

15. The apparatus unit replacement assisting method according to claim 1, further comprising:

20 a step of presenting a dispatch date of a service person who performs unit replacement to said first user.

16. The apparatus unit replacement assisting method according to claim 1, further comprising:

a step of confirming a reply from said first user;  
and

25 a step of managing at least one of a production line in a factory, a unit maintenance line, and dispatch of a service person, depending on the reply

from said first user.

17. The apparatus unit replacement assisting method according to claim 1, wherein:

5       said first apparatus and said second apparatus are X-ray computed tomography apparatus and said units are detectors, X-ray tubes, or diagnostic table apparatuses.

18. An apparatus unit replacing method, comprising:

10       a step of notifying, from a user to a unit provider and manager, a replacement request of a unit comprising part of an apparatus;

15       a step of notifying, from said user to said unit provider and manager, a specific target replacement unit; and

      a step of notifying, from said user to said unit provider and manager, whether said user wishes a new unit or a secondhand unit for the target replacement unit.

20       19. The apparatus unit replacing method according to claim 18, wherein:

      said unit is a unit that needs to be replaced by a worker.

25       20. The apparatus unit replacing method according to claim 18, further comprising:

      a step of confirming whether the unit specified by said user is replaceable in said apparatus.

21. The apparatus unit replacing method according to claim 18, further comprising:

a step of fixing a date when a worker replaces said unit with the target replacement.

5 22. The apparatus unit replacing method according to claim 18, further comprising:

a step of confirming with said user whether said unit to be replaced is for trade-in.

10 23. The apparatus unit replacing method according to claim 22, further comprising:

a step of confirming a trade-in price or an assessed price of said unit for trade-in when said user wishes a trade-in.

15 24. The apparatus unit replacing method according to claim 23, wherein:

said step of confirming the trade-in price or the assessed price includes, making a trial calculation of the trade-in price or the assessed price by adding expenses needed for replacement including a transportation fee to a trade-in base price, and judging a value of the trade-in from or assessed the trial calculation.

20 25. The apparatus unit replacing method according to claim 23, further comprising:

a step of having said user wishing to trade in said unit present operation history information through an on-line or off-line transmission in a case where said apparatus is configured to automatically record

the operation history information during use, and  
judging a value of the trade-in with understanding of a  
use status of said unit for trade-in from the operation  
history information,

5            wherein said step of confirming the trade-in price  
or the assessed price includes determining the trade-in  
price or the assessed price based on a result of the  
value judgment.

26. An apparatus unit replacement assisting  
10           system, comprising:

             a plurality of user apparatuses owned by  
a plurality of apparatus users; and

             one or more management apparatus owned by  
an apparatus manager,

15           wherein said management apparatus includes:  
             communication means for enabling communications  
with said plurality of user apparatuses;

             request information managing means for managing  
request information received from a first user  
20           apparatus among said plurality of user apparatuses  
through said communication means, said request  
information expressing a wish to replace a first  
unit comprising part of a first apparatus owned by  
an apparatus user of said first user apparatus with  
25           a second unit;

             release information managing means for managing  
release information received from a second user

apparatus, different from said first user apparatus,  
among said plurality of user apparatuses through said  
communication means, said release information informing  
release of a second unit comprising part of a second  
5 apparatus owned by an apparatus user of said second  
user apparatus and usable in said first apparatus; and

inquiry information notifying means for notifying,  
through said communication means, said first user  
apparatus of inquiry information, asking whether the  
10 second unit in said second apparatus is going to be  
used as a replacement unit for said first apparatus,  
and

wherein each user apparatus includes:

communication means enabling communications with  
15 any one of the one or more management apparatuses;

information notifying means for notifying said  
management apparatus of said unit replacement request  
information and said unit release information through  
said communication means; and

20 information presenting means for presenting said  
inquiry information received from said management  
apparatus through said communication means.

27. A management apparatus used in an apparatus  
unit replacement assisting system comprising a  
25 plurality of user apparatuses owned by a plurality of  
apparatus users and one or more management apparatus  
owned by an apparatus manager, said management



apparatus being characterized by comprising:

communication means for enabling communications  
with said plurality of user apparatuses;

request information managing means for managing  
5 request information received from a first user  
apparatus among said plurality of user apparatuses  
through said communication means, said request  
information expressing a wish to replace a first  
unit comprising part of a first apparatus owned by  
10 an apparatus user of said first user apparatus with  
a second unit;

release information managing means for managing  
release information received from a second user  
apparatus, different from said first user apparatus,  
15 among said plurality of user apparatuses through said  
communication means, said release information informing  
release of a second unit comprising part of a second  
apparatus owned by an apparatus user of said second  
user apparatus and usable in said first apparatus; and

20 inquiry information notifying means for notifying,  
through said communication means, said first user  
apparatus of inquiry information, asking whether the  
second unit in said second apparatus is going to be  
used as a replacement unit for said first apparatus.

25 28. The management apparatus in the apparatus unit  
replacement assisting system according to claim 27,  
further comprising:

status managing means for managing at least any one of a production line status in a production factory of said apparatus, a maintenance line status of said unit, and a dispatch status of a service person who  
5 performs a replacement work, according to the replacement request information from said first user apparatus.

29. A user apparatus used in an apparatus unit replacement assisting system comprising a plurality of  
10 user apparatuses owned by a plurality of apparatus users and one or more management apparatus owned by an apparatus manager, said user apparatus being characterized by comprising:

communication means enabling communications with  
15 any one of the one or more management apparatuses;

information notifying means for notifying said management apparatus of said unit replacement request information and unit release information through said communication means; and

20 information presenting means for presenting inquiry information received from said management apparatus through said communication means.

30. An apparatus unit replacement assisting system, characterized by comprising:

25 managing means for managing information of a unit comprising part of an apparatus for each of apparatuses installed at a plurality of sites; and

confirming means for confirming, in response to information related to a request to replace said unit in an apparatus installed at any one of said plurality of sites, whether a secondhand unit is acceptable as  
5 a target replacement unit for said unit.

31. An apparatus unit replacement assisting system, characterized by comprising:

obtaining means for obtaining information of a unit comprising part of an apparatus for each of  
10 apparatuses installed at a plurality of sites; and

managing means for managing, in response to information related to a request to replace said unit in an apparatus installed at any one of said plurality of sites, at least one of a production line in a  
15 production factory of said apparatus, a maintenance line of said unit, dispatch of a service person who performs a replacement work of said unit.

32. An apparatus unit replacement assisting system, characterized by comprising:

20 obtaining means for obtaining information of a unit comprising part of an apparatus for each of apparatuses installed at a plurality of sites; and

presenting means for presenting, in response to information related to a request to replace a first  
25 unit with a second unit in an apparatus installed at one of said plurality of sites, a sales price of said second unit after deduction of a trade-in price of said

first unit to a request sender site.

33. The apparatus unit replacement assisting system according to claim 32, wherein:

5       said presenting means makes a trial calculation  
of the trade-in price by adding expenses needed for  
replacement including a transportation fee to a trade-  
in base price, judges a value of a trade-in from the  
trial calculation, and presents the trade-in price when  
the trade-in is judged as profitable.

10       34. The apparatus unit replacement assisting system according to claim 32, wherein:

      said obtaining means is operation history  
information during use that is automatically recorded  
by said apparatus; and

15       said presenting means judges a value of a trade-in  
with understanding of a use status of the unit for  
trade-in from the operation history information, and  
determines the trade-in price based on a result of the  
value judgment.